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220 11-1945

COMPLETE SPECIFICATION NEALE

SHEET 1

[This Drawing is a reproduction of the Original on a reduced scale.]

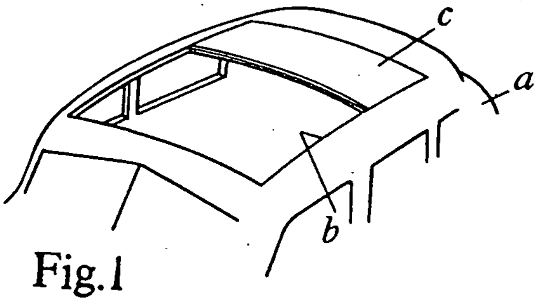

Fig.1

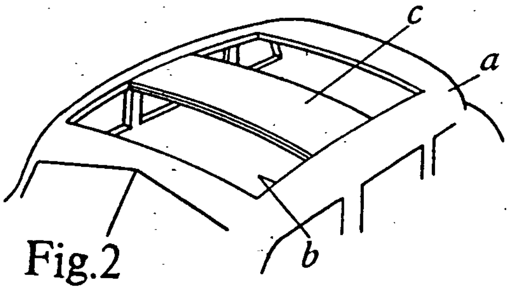

Fig.2

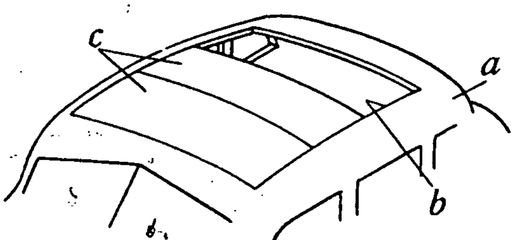

Fig.3

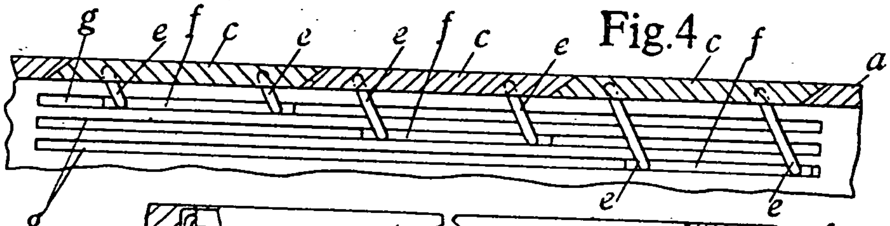

Fig.4

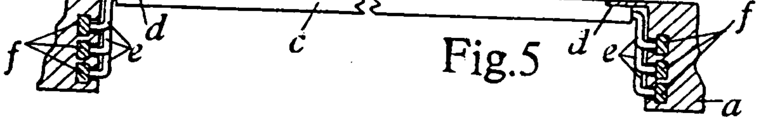

Fig.5

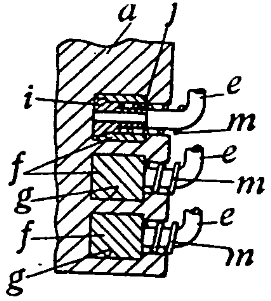

Fig.6

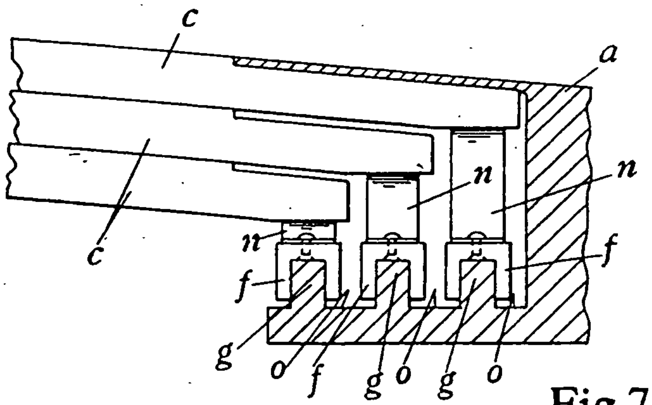

Fig.7

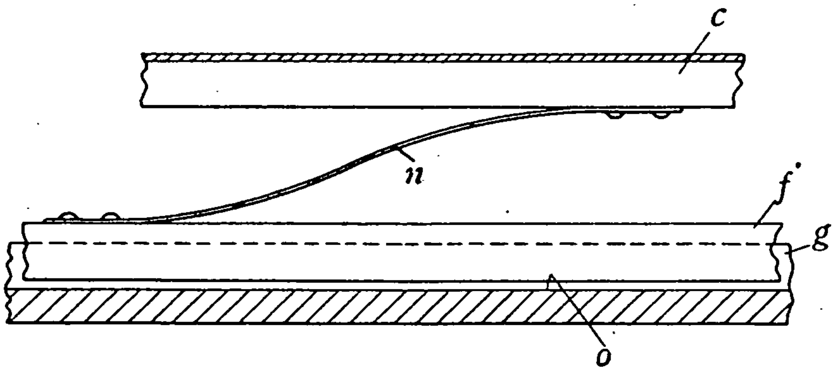

Fig.8

PATENT SPECIFICATION

Application Date: Dec. 10, 1943. No. 20694/43.

573,355

Complete Specification Left: Sept 14, 1944.

Complete Specification Accepted: Nov. 16, 1945.

EXAMINER'
COPY
DIV. 47

PROVISIONAL SPECIFICATION

Improvements relating to Slidable Roofs for Motor Vehicle Saloon Bodies

I, EDGAR WALTER NEALE, a British Subject, of Cypress House, Manor Lane, Quinton, in the City of Birmingham, 32, do hereby declare the nature of this invention to be as follows:—

This invention has for its object to provide an improved slidable roof construction for motor vehicle saloon bodies.

The invention consists of the combination of a body having in its roof a rectangular aperture, and a plurality of separate panels adapted to close the said aperture, or, by relative movements of the panels beneath or above each other, to expose any desired part of the aperture.

In one manner of carrying the invention into effect, there is formed in the roof of the body an aperture of rectangular form occupying the greater part of the area of the roof. The longitudinal edges of the aperture are adapted to support and form guides for a plurality of separate and independently movable panels. Any desired number of panels may be used, the minimum being two. For most purposes, three is a convenient number. These panels and their supporting guides are such that when the aperture is closed, the upper surfaces of the panels are flush with each other and with the adjacent upper surface of the body. Any convenient provision is made whereby the panels may be slid under or over each other to expose any desired part of the roof aperture.

By this invention I am able to arrange for the opening of any part of the roof aperture to any desired extent in a very simple and convenient manner.

Dated this 9th day of December, 1943.

MARKS & CLERK.

COMPLETE SPECIFICATION

Improvements relating to Slidable Roofs for Motor Vehicle Saloon Bodies

I, EDGAR WALTER NEALE, a British Subject, of Cypress House, Manor Lane, Quinton, in the City of Birmingham, 32, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention has for its object to provide an improved slidable roof construction for motor vehicle saloon bodies.

The invention consists of the combination of a body having in its roof a rectangular aperture, and a plurality of separate panels which when situated side by side close the said aperture and have their upper surfaces flush with each other and with the adjacent portions of the upper surface of the body, and which by relative movement beneath or above each other enable any part of the aperture to be exposed independently of the other part.

In the accompanying sheets of explanatory drawings:—

Figures 1 to 3 are similar perspective views illustrating diagrammatically the upper part of a motor vehicle saloon body having a roof constructed in accordance with the invention, the movable panels being shown in different positions in the various Figures.

Figures 4 and 5 are respectively a fragmentary sectional side view and a sectional end view illustrating the roof to a larger scale than Figures 1 to 3.

Figure 6 is a fragmentary sectional view illustrating to a larger scale than Figures 4 and 5 the means whereby the panels are supported.

Figure 7 is a fragmentary sectional end view, and Figure 8 a corresponding sectional side view, illustrating a modified form of the invention.

In carrying the invention into effect as shown in Figures 1 to 6, there is formed

[*Price* 1/-]

296/-

in the roof of the vehicle body *a* an aperture *b* of rectangular form occupying the greater part of the area of the roof. Within the aperture *b* are arranged a plurality of separate and independently movable panels *c*. Any desired number of such panels may be used, the minimum being two, but for most purposes three is a convenient number, this being the number shown. The panels *c* are adapted when situated side by side to close the aperture *b*. In this condition of the panels *c* their upper surfaces are flush with each other and with the adjacent portions of the upper surface of the body *a*. If desired the portions of the body *a* which flank the two sides of the aperture *b* may be formed at the upper edges with thin lips *d* (Figure 5) which overlap the adjacent portions of the panels *c*, the upper surfaces of these panel portions being recessed to accommodate the lips.

Each panel *c* is carried by a parallel-motion linkage consisting of two pairs of inclined links *e* arranged at opposite sides of the panel, and slides *f* connected by the links to the panel, the slides being mounted in different longitudinal guide channels *g* formed one above the other in the portions of the body *a* which flank the sides of the aperture *b*. The spacing of the adjacent guide channels *g* and the lengths of the links which connect the corresponding slides *f* to the panels *c* are such that by relative movements of the panels beneath or above each other, any desired part of the aperture *b* can be exposed. To prevent the links *e* from obstructing the required movements of the panels *c*, each link is cranked at one end in one direction and at the other end in the opposite direction, one of the cranked ends being in pivotal engagement with a complementary socket (not shown) in the adjacent edge of the corresponding panel, and the other of the cranked ends being pivotally connected to the corresponding slide *f* through the medium of a shouldered bush *i* (Figure 6) mounted on the cranked end and arranged in a complementary hole *j* in the slide.

To prevent unintentional movement of the panels *c* the ends of the links *e* connected to the slides *f* are surrounded by helical springs *m* which are attached at one end to the associated link and at the other end to the corresponding slide.

In the modification shown in Figures 7 and 8 the links above mentioned are dispensed with, and the panels *c* are carried by springs *n* on slides *f* of inverted channel form, the slides being supported by longitudinal guides *g* on the adjacent parts of the body *a*. Also the panels *c* are made of different lengths in the transverse direction of the body *a* to accommodate the springs *n* which have the form of bent metal strips, one such strip being provided at each end of each panel, and being attached at its opposite ends to the corresponding panel and slide *f* respectively. Further the adjacent guides *g* form between them channels *o* for trapping any moisture that may leak between the ends of the panels *c* and the body *a*. In Figure 7 the panels *c* are shown for convenience in the positions in which they lie one above the other.

In either of the examples above described any convenient means, such as handles, may be provided on the panels for imparting the required movements thereto.

By this invention I am able to arrange for the opening of the roof aperture to any desired extent in a very simple and convenient manner. The invention is not, however, limited to the examples above described as subordinate details may be varied to suit different requirements.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A motor vehicle saloon body having in its roof a rectangular aperture, and a plurality of separate panels which when situated side by side close the said aperture and have their upper surfaces flush with each other and with the adjacent portions of the upper surface of the body, and which by relative movement beneath or above each other enable any part of the aperture to be exposed independently of the other part.

2. A motor vehicle saloon body as claimed in Claim 1 in which the panels are carried by parallel-motion linkages slidably supported by the body, the linkages having in combination with them springs for preventing unintentional movement of the panels.

3. A motor vehicle saloon body as claimed in Claim 1, in which the panels are carried by springs on members slidably supported by guides on the body.

4. A motor vehicle saloon body as claimed in Claim 3, in which the guides form between them moisture-trapping channels.

5. A motor vehicle saloon body as claimed in Claim 1 and having the combination and arrangement of parts substantially as described and as illustrated

in Figures 1 to 6 or Figures 7 and 8 of the accompanying drawings.

Dated this 22nd day of August, 1944.

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